

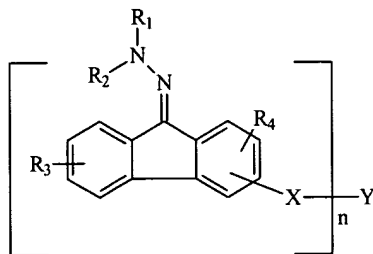
ORGANOPHOTORECEPTOR WITH CHARGE TRANSPORT

MATERIAL WITH FLUORENONE HYDRAZONE GROUPS

Abstract of the Disclosure

Improved organophotoreceptor comprises an electrically conductive substrate and a photoconductive element on the electrically conductive substrate, the photoconductive element comprising:

(a) a charge transport material having the formula



where n is an integer between 2 and 6, inclusive;

R₁ and R₂ are, independently, an alkyl group, an alkaryl group, or an aryl group with the proviso that neither R₁ nor R₂ is a naphthyl group, a stilbenyl group, alkylsulfonylphenyl group or a (9H-fluoren-9-ylidene)benzyl group;

R₃ and R₄ are, independently, H, halogen, carboxyl, hydroxyl, thiol, cyano, nitro, aldehyde group, ketone group, an ether group, an ester group, a carbonyl group, an alkyl group, an alkaryl group, or an aryl group;

X is a linking group having the formula -(CH₂)_m-, branched or linear, where m is an integer between 0 and 20, inclusive, and one or more of the methylene groups can be optionally replaced by O, S, C=O, O=S=O, a heterocyclic group, an aromatic group, urethane, urea, an ester group, a NR₅ group, a CHR₆ group, or a CR₇R₈ group where R₅, R₆, R₇, and R₈ are, independently, H, an alkyl group, an alkaryl group, a heterocyclic group, or an aryl group; and

Y comprises a bond, C, N, O, S, a branched or linear -(CH₂)_p- group where p is an integer between 0 and 10, an aromatic group, a cycloalkyl group, a heterocyclic group, or a NR₉ group where R₉ is hydrogen atom, an alkyl group, or aryl group, wherein Y has a structure selected to form n bonds with the corresponding X groups; and

(b) a charge generating compound.

Corresponding electrophotographic apparatuses and imaging methods are described.